

UNITED STATES DEPARTMENT OF COMMERCE National Telecommunications and Information Administration Washington, D.C. 20230

FT Docket No. 98-237

JUN 3 0 2000 EX PARTE OR LATE FILED RECEIVED

Mr. Dale Hatfield Chief Office of Engineering Technology Federal Communications Commission Washington, DC 20554 SEP.1 9 2000

Federal Communications Commission Office of Secretary

Re:

Petition for Rulemaking - Fixed Wireless Access (FWA): Petition for Allocation of Radio Spectrum and Licensing Rules in the 3.4-3.7 GHz Band to Allow Carriers to Improve Deployment and Reduce Costs Through the Provision of Fixed Wireless Access

Dear Mr. Hatfield:

The Federal Communications Commission (FCC) has before it a Petition for Rulemaking on behalf of Mountain Telecommunications, Inc. and Saddleback Communications Company for allocation of the 3.4-3.7 GHz band for FWA. The band 3400-3650 MHz is allocated on a primary basis to the Government for radiolocation and aeronautical radionavigation services.

At the request of NORTEL, a limited study between a first-generation NORTEL manufactured FWA system and various military radar systems was performed by the Department of Defense (DOD) Joint Spectrum Center (JSC). Results of the study indicate that significant geographical and frequency separations are necessary for mutual compatible operation, and that these separations are very dependent upon scenarios and technical parameters of the systems studied. Other FWA systems are being similarly evaluated. We are seeking to have the final results of these evaluations as soon as possible. Therefore, the NORTEL FWA system analyzed may not be representative of other manufacturer's FWA equipment. Currently, there is no way to determine the extent to which these NORTEL results could or should be universally applied to FWA systems.

DOD is very concerned, as stated in their enclosed letter, about the potentially mutual harmful effects between present and future radar applications and FWA operations should the band be reallocated. The radars operating in the band are highly mobile and have large service areas. We are also concerned about possible effects of our systems on FWA reliability and performance. In addition, upgrades to some of the existing radar systems operating in this band are being considered for part of the National Missile Defense System. This could result in a major expansion of radar operations in this band. Furthermore, allowing FWA in this spectrum would reduce or eliminate any flexibility to incorporate new capabilities in these vital radars, potentially leading to compromises in

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the radar design that could adversely affect mission requirements. Loss of access to this band due to FWA systems would cause irreparable harm to the U.S. military's ability to perform critical surveillance tasks, testing, and training against hostile electronic threats, both present and in the future.

NTIA cannot concur with this petition for a co-equal primary status that would impose significant constraints on Government radiolocation systems and eliminate the flexibility needed to address current and future radiolocation needs. Therefore, NTIA requests the petition be dismissed.

Sincerely,

William T. Hatch Associate Administrator

William

Office of Spectrum Management

Enclosure: Asst. Secy of Def Ltr, Mar 13, 00

cc: Arthur L. Money, Asst Secy of Defense



ASSISTANT SECRETARY OF DEFENSE 6000 DEFENSE PENTAGON WASHINGTON, DC 20301-6000



March 13, 2000

COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE

Honorable Gregory L. Rohde
Assistant Secretary for
Communications and Information
U.S. Department of Commerce
14th Street and Constitution Avenue, NW
Washington, DC 20230

Dear Mr. Rohde:

We are forwarding to you as an enclosure to this letter the Department of Defense Joint Spectrum Center's (JSC's) analysis of the feasibility of sharing the 3400–3650 MHz spectrum between its current government uses and civilian fixed wireless systems. Our conclusion is that the requisite separation distances and other operating limitations are so onerous that sharing is not feasible.

The 3400-3650 MHz frequency band is being targeted for operation of Fixed Wireless Access (FWA) systems in many countries. One manufacturer of such systems, Northern Telecomm (NORTEL), is interested in deploying its system (the "Proximity I" system) within the United States and its possessions (US&P). This portion of the spectrum presently is allocated for Federal Government radiolocation (3400-3650 MHz) and aeronautical radionavigation (3500-3650 MHz) services on a primary basis. NORTEL sought the assistance of the JSC to determine if such sharing was feasible. The Department of Defense was willing to participate in this analysis and agreed to perform a NORTEL-funded study.

The January 2000 JSC assessment report documents the results of analytical studies and live tests. Based upon the JSC assessment and DoD's critical ongoing and future uses of this spectrum, we have concluded that there is a mutual incompatibility between the NORTEL Proximity I system, as currently configured, and several DoD systems, even when separated by distances of several hundred kilometers. Moreover, if the 3400-3650 MHz band were to become available within the US&P for FWA systems, other potential FWA designs with more sensitive operating characteristics could increase the potential for interference and thus require even greater separation distances.

The DoD radar systems that operate in the 3400-3650 MHz band are some of DoD's most important assets. DoD requires unfettered access to this spectrum over the full geographical area of the US&P. In the future, these radar systems and their successors are likely to require access to even more spectrum in order to meet new missions and increased responsibilities already assigned to them. Additionally, DoD must test, train, and conduct exercises against foreign threats that operate in this band. In the past, DoD has been able to conduct such critical operations in this band in the US&P only because the current primary allocation is



effectively limited to military use. Such training and testing is not possible elsewhere because other uses have been designated as primary in the band. Keeping this spectrum available for military needs, without limitations, therefore, has become increasingly important. FWA encroachment on radar spectrum would reduce or eliminate any flexibility we may currently have to incorporate new capabilities into these vital radars and would make the testing and training needed to meet new missions virtually impossible.

MountainTel and Saddleback Communications, Scottsdale, Arizona, operators of a Proximity I system, were granted a temporary, experimental license to transmit at a Native American community in Arizona. These operators petitioned the Federal Communication Commission (FCC) to modify the status of the 3400-3650 MHz frequency band, within the U.S., to a shared primary allocation between non-government fixed service and government radiolocation services, stating that they believe that it will be feasible to define reasonable technical coordination rules that will enable operators like MountainTel to deploy in a manner that will not adversely impact DoD's operations in this band. We disagree with their view. The results of the JCS assessment report indicate that no such sharing is feasible. The required geographic and frequency restrictions are not possible to achieve throughout the United States. Given the limited number of users in the Scottsdale experiment, and the relative lack of use of that area by relevant DoD systems, we do not believe the Scottsdale experiment addresses whether a system in a large metropolitan area could cause the various DoD systems much more interference, or, if a DoD operation could one day interfere with, for example, a critical emergency call put through an FWA system.

In conclusion, DoD is unable to accept any type of operational limitations to its radar operations to ensure compatibility with FWA systems and the JSC assessment report did not identify any means of sharing of spectrum that could be imposed without a major negative impact on national security. We believe that the current government-only allocation must be maintained and FWA operators limited to non-government or shared bands for the development of their systems.

Sincerely.

Arthur L. Money

Enclosure